

<https://doi.org/10.48047/AFJBS.6.si2.2024.5820-5832>



A STUDY ON STRESS, DEPRESSION AND ANXIETY AMONG NEET ASPIRANTS

Authors: Dr. Lakshmi Arun, Associate professor, Mount Carmel college Bangalore

Divya Reddy MSc Psychology student, Mount Carmel College, Bangalore

Volume 6 issue si2 2024

Received:15May2024

Accepted:10June2024

doi:10.48047/AFJBS.6.

si2.2024.5820-5832

Abstract

Student mental health problems are the most talked about topics these days, especially the students preparing for entrance exams like NEET, as there has been a lot of reports about suicides and psychological breakdowns of NEET aspirants in the past few years. The current study focuses on finding out whether there is a correlation between depression, stress and anxiety among NEET aspirants, and whether there is a difference between male and female NEET aspirants with respect to stress, anxiety, and depression. The sample taken for this study was 72 male and female NEET aspirants whose age range was between 18 to 22 years. The snowball sampling method was used to collect the data. The DASS-21 self-report scale was used to assess the participants and the demographic details of the participants were collected with the responses from the scale via google forms. The data was statistically analysed using SPSS. The Shapiro wilk test of normality was run on the data along with the spearman's rank correlation coefficient test and Mann Whitney U Test. the findings of the study suggested that there is a significant positive correlation between stress, depression and anxiety, and that there is a significant difference between male and female NEET aspirants with respect to stress, and depression only. The results also showed that there was no significant difference seen between male and female NEET aspirants with respect to anxiety.

Key words: Stress, Anxiety, Depression, NEET aspirants.

Introduction

In today's world students deal with a lot of problems, as there is a lot of pressure put on them to accomplish something with their lives. One of the leading causes of mental health problems in students nowadays are entrance exams preparations, the fear of failing entrance exams, and fear of being scrutinized by their family members, relatives, friends, society etc

(Premkumar et al., 2022). according to a survey done in 2023, National eligibility cum entrance test (Under graduate) NEET (UG) entrance exam is one of the top 5 toughest exams to crack in India (top 10 toughest exams in India, 2023).

Stress and students: In today's world being a student is very stressful, as students struggle with a lot of challenges like homework, assignments, deadlines for submission of assignments, reports, lab records, studying for exams, exam results, fear of passing or failing, facing teachers and parents if they obtained bad marks, being judged by relatives, peers, siblings, friends, cracking entrance exams, trying to getting into prestigious colleges and universities etc.

Anxiety and academics : According to many surveys conduct in India recently, it is suggested that most of the school going and college going students face tremendous amounts of anxiety due to several reasons like – hectic academic syllabus, examination related anxiety, results related anxiety, deadline related anxiety, pressure caused by family, friends, teachers, peers, society, relatives etc.

A survey conducted by NCERT stated that 81% students consider that studies, exam and results are the major triggers of anxiety. Anxiety if left untreated can cause a lot of other mental disorders in people like – depression, obsessive compulsive disorder, suicide ideation, psychotic episodes, substance abuse, self-harm etc, (The Two Biggest Mental Health Problems in Students and How to Deal with Them, 2022).

Depression : Depression is known as a condition in which a person experiences profound sadness and/or the inability to experience any kind of pleasure. It is a condition which is persistent with continuous low mood and psychomotor retardation

Need for the Study

Through this study people not only in India but across the world would gain knowledge and understanding about the impact mental health problems have on students preparing for entrance exams like NEET. This study could help future NEET aspirants to get help in case they need it and could also help in persuading the government and education facilities to start initiatives that provide mental health care to students who are preparing for entrance exams like NEET.

Preetha, Sridevi, Gaytri, Esha, (2021). Conducted a study on stress induced by NEET coaching among private secondary school children. 115 adolescent children studying in 10th, 11th, 12th grade from private schools in Chennai were taken as the population for this study. Random sampling technique was used for data collection and the students were assessed using a study specific questionnaire. The results suggested that most of the students reported high levels of stress. The male students reported to have significantly higher levels of stress compared to the female students. The conclusion suggested that effective interventions should be made to help students maintain their stress levels.

Premkumar, Sarojini, Vikram, Chinaian, (2022). conducted a study to understand the prevalence of depression and anxiety in NEET aspirants. The study was a community based cross sectional analytical study conducted on students of various NEET coaching centres in Chennai. The study was conducted on 250 NEET aspirants. The materials used in this study were Beck's depression inventory II and Beck's anxiety inventory. The results suggested that severe depression was seen in students who were attempting the exam for the first time and who were attempting the exam for the third time. And almost all the students showed signs of anxiety. It was observed that the number of previous attempts had a significant association with the severity of anxiety and depressive symptoms. In conclusion it was suggested that there should be preventive and curative mental health services for students preparing for NEET exam.

Khursheed, Naseem, (2021). Conducted a study on anxiety, stress, depression, life quality among medical students and medical aspirants of Aligarh city, India. The population taken for this study was 220 students consisting 11th and 12th grade students, 12th grade pass outs who are preparing for medical entrances, and medical students. The tools used for the assessment were – World Health Organization Quality of Life scale and Depression, anxiety, stress scale. The results of the study suggested that levels of anxiety and depression were higher in respondents compared to stress, it was noticed that 11th and 12th grade students had more anxiety, stress, and depression. The Pearson's coefficient alpha and the *P* value suggested that stress, anxiety and depression levels were quite gender centric, moreover the physical domain of QOL scores show a negative correlation with stress, depression and anxiety scores. The results suggest that there is a significant effect on student's mental health with regard to stress, anxiety, and depression and measures should be taken to reduce the effects.

Methodology

Aims

To assess the level of stress, anxiety and depression in NEET aspirants.

Objective

To study the significant relationship between stress and depression amongst NEET Aspirants.

To study the significant relationship between stress and anxiety amongst NEET Aspirants.

To study the significant relationship between anxiety and depression amongst NEET Aspirants.

To compare male and female NEET aspirants on Depression, anxiety, and stress and to study if there is a significant difference between the levels of depression, anxiety, and stress amongst NEET aspirants.

Operational definitions

Stress - is defined as – “the physiological or psychological response to internal or external stressors. Stress involves changes affecting nearly every system of the body, influencing how people feel and behave. For example, it may be manifested by palpitations, sweating, dry mouth, shortness of breath, fidgeting, accelerated speech, augmentation of negative emotions (if already being experienced), and longer duration of stress fatigue”. (*APA Dictionary of Psychology*).

Anxiety – is defined as – “an emotion characterized by apprehension and somatic symptoms of tension in which an individual anticipates impending danger, catastrophe, or misfortune”. (*APA Dictionary of Psychology*).

Depression – is defined as – “A negative affective state, ranging from unhappiness and discontent to an extreme feeling of sadness, pessimism, and despondency, that interferes with daily life. Various physical, cognitive, and social changes also tend to co-occur, including altered eating or sleeping habits, lack of energy or motivation, difficulty concentrating or making decisions, and withdrawal from social activities. It is symptomatic of a number of mental health disorders”. (*APA Dictionary of Psychology*).

Hypotheses

H0 1–there is no relationship between stress and anxiety.

H0 2–there is no significant relationship between stress and depression.

H0 3–there is no relationship between anxiety and depression.

H0 4- there is no significant difference between the scores of male and female NEET aspirants with regard to stress

H0 5- there is no significant difference between the scores of male and female NEET aspirants with regard to anxiety

H0 6- there is no significant difference between the scores of male and female NEET aspirants with regard to depression

Sample : The sample for this study was selected using the snowball sampling method. The total sample consisted of 72 Indian male and female NEET Aspirants. Whose age lies between 18 – 22 years.

Inclusion and exclusion criteria

The inclusion criteria –

- NEET Aspirants - male and female students studying in India, who are between the ages 18 to 22 years. And who are enrolled in coaching centres.

The exclusion criteria –

- Students who do not come under the age range of 18 years to 22 years.
- Students who are not NEET Aspirants.
- Students who don't go to coaching centres

Procedure

The Indian NEET aspirants were approached individually through online and offline communicative methods and were asked to participate in the study by filling out a questionnaire sent to them on google forms. The link to fill the forms were sent through social media platforms like WhatsApp, Instagram, snapchat, and telegram. The participants were asked for their consent, and other demographic details prior answering the scale. The NEET aspirants were given instructions on how to fill the forms and were told to clear any doubts they have before answering the questionnaire. They were given the Depression, Anxiety, Stress Scale DASS-21 to answer, the DASS-21 scale was given to measure the levels of anxiety, depression and stress in the participants. After the assessment tool was administered on the volunteers the data was collected and was used to score and interpret the responses received with the help of the scoring key and norms. The scores were then transferred into the SPSS 26 software for analysis.

Tools and psychometric properties

The instrument used for assessing the variables selected is – Depression, Anxiety, Stress Scale-21 (DASS-21).

DASS-21 is a self-report measure of anxiety, depression and stress signals. This scale was developed by Lovibond and Lovibond in 1995. DASS-21 is the shortened version of DASS.

Ethical considerations

- An Informed consent sheet was provided beforehand.
- confidentiality regarding the answers was maintained.
- The volunteers were allowed to leave the study at any given point.
- Referrals were made where necessary

Data analysis: The statistical analysis of the obtained data was done by using IBM, SPSS version 26. A test of normality was conducted on the data, following which the spearman's correlation test and t test were conducted on the data.

Results

The aim of the study was to understand the relationships between stress and anxiety, stress and depression, and depression and anxiety amongst NEET (UG) aspirants by assessing 72 participants, in which 32 participants were male NEET aspirants and 32 participants were female NEET aspirants. This study also aimed to compare the results of the male and female NEET aspirants to find out whether there was a significant difference in the levels of stress, anxiety and depression between the males and females.

Statistical analysis was done by using SPSS on the data and the results are presented below.

Table 1.

Showing the descriptive statistics for the entire sample (n=72)

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Depression	72	4.00	34.00	21.2500	5.20225
Anxiety	72	6.00	36.00	22.0556	5.90986
Stress	72	6.00	36.00	22.1667	5.60432
Valid N (listwise)	72				

Table 1 shows the descriptive statistics for the entire data sample $N = 72$ i.e., for 72 male and female NEET aspirants. the mean score obtained in the dimension of depression is 21.2500 which indicates that on an average the group has severe level of depression and the standard deviation obtained in the depression domain is 5.20225. the mean score obtained in the dimension of anxiety is 22.0556 which indicates that on an average the group has extremely severe level of anxiety and the standard deviation obtained in the anxiety domain is 5.90986. the mean score obtained in the dimension of stress is 22.1667 which indicates that on an average the group has moderate level of stress and the standard deviation obtained in the stress domain is 5.60432.

Table 2

Showing the results of the Shapiro-Wilk test for normality of data distribution

	Shapiro-Wilk		
	Statistic	df	Sig.
Depression	.942	72	.002
Anxiety	.934	72	.001
Stress	.923	72	.000

Table 2 shows the results of the Shapiro-Wilk test for normality of data distribution. The entire data sample ($n=72$) was tested using the Shapiro-Wilk test for normality. The statistic for depression is 0.942, the statistic for anxiety is 0.934 and the statistic for stress is 0.923. the significance level for depression is 0.002, the significance level for anxiety is 0.001, and the significance level for stress is 0.000 which means that overall, the data is not normally distributed.

Table 3

Showing the results of spearman's rank correlation coefficient between stress and anxiety

		Anxiety	Stress
Spearman's rho	Anxiety	Correlation Coefficient	1.000
		Sig. (2-tailed)	.000
		N	72
	Stress	Correlation Coefficient	.617**
		Sig. (2-tailed)	.000
		N	72

** correlation is significant at the 0.01 level

Table 3 shows the results of spearman's rank correlation coefficient between stress and anxiety on the data of 72 NEET aspirants. the correlation coefficient obtained for anxiety is ($r=1.000$; $p<0.01$) and for stress is ($r=0.617$; $p<0.01$). this indicates that anxiety and stress have a significant positive correlation with each other.

Table 4

Showing the results of spearman's rank correlation coefficient between stress and depression

		Stress	Depression
Spearman's rho	Stress	Correlation Coefficient	1.000
		Sig. (2-tailed)	.000
		N	72
	Depression	Correlation Coefficient	.517**
		Sig. (2-tailed)	.000
		N	72

** correlation is significant at the 0.01 level

Table 4 shows the results of spearman's rank correlation coefficient between stress and depression on the data of 72 NEET aspirants. the correlation coefficient obtained for

depression is ($r=.517$; $p<0.01$) and for stress is ($r=1.000$; $p<0.01$). this indicates that depression and stress have a significant positive correlation with each other.

Table 5

Showing the results of spearman's rank correlation coefficient between depression and anxiety

			Depression	Anxiety
Spearman's rho	Depression	Correlation Coefficient	1.000	.619**
		Sig. (2-tailed)	.	.000
		N	72	72
	Anxiety	Correlation Coefficient	.619**	1.000
		Sig. (2-tailed)	.000	.
		N	72	72

** correlation is significant at the 0.01 leve

Table 5 shows the results of spearman's rank correlation coefficient between anxiety and depression on the data of 72 NEET aspirants. the correlation coefficient obtained for anxiety is ($r=0.619$; $p<0.01$) and for depression is ($r=1.000$; $p<0.01$). this indicates that depression and anxiety have a significant positive correlation with each other.

Table 6

shows the descriptive statistics and results of the Man-Whitney U test for mean differences based on gender.

	Gender	N	Mean	Std. Deviation	Std. Error Mean	Mean Rank	Sum of Ranks
Depressi on	Female	36	19.7778	5.90453	.98409	31.57	1136.50
	Male	36	22.7222	3.94687	.65781	41.43	1491.50
Anxiety	Female	36	20.6111	6.97456	1.16243	32.71	1177.50

	Male	36	23.500	4.23253	.70542		
			0			40.29	1450.50
Stress	Female	36	20.444	6.39841	1.06640	30.22	1088.00
			4				
	Male	36	23.888	4.08326	.68054	42.78	1540.00
			9				

Table 6 shows the descriptive group statistics of the entire data (N=72) based on gender. There are total of 36 female and 36 male data shown in the above table. The mean score obtained by the females in the domain of depression is 19.77 which is interpreted as moderate level of depression, The mean score obtained by the females in the domain of anxiety is 20.611 which is interpreted as extremely severe level of depression, The mean score obtained by the females in the domain of stress is 20.444 which is interpreted as moderate level of stress. The mean score obtained by the males in the domain of depression is 22.722 which is interpreted as severe level of depression, The mean score obtained by the males in the domain of anxiety is 23.500 which is interpreted as extremely severe level of depression, The mean score obtained by the males in the domain of stress is 23.889 which is interpreted as moderate level of stress.

Table 7

shows the test statistics and the results of Mann-Whitney U test for the entire data.

	Depression	Anxiety	Stress
Mann-Whitney U	470.500	511.500	422.000
Wilcoxon W	1136.500	1.178E3	1.088E3
Z	-2.034	-1.557	-2.580
Asymp. Sig. (2-tailed)	.042	.119	.010

a. Grouping Variable: Gender

The table above shows the test statistics and the Mann-Whitney U results on the entire data(N=72). the Mann-Whitney U scores for depression is (u=470.500; p<0.05) which means that there is a significant difference between the scores of males and females in the domain of

depression. the Mann-Whitney U scores for anxiety is ($u=511.500$; $p>0.05$) which means that there is no significant difference between the scores of males and females in the domain of anxiety. the Mann-Whitney U scores for stress is ($u=422.000$; $p<0.05$) which means that there is a significant difference between the scores of males and females in the domain of stress.

Conclusion

1. NEET aspirants go through a considerable amount of stress, anxiety, and depression
2. Stress and anxiety have shown to have a significant relationship with each other.
3. Stress and depression have shown a significant relationship with each other.
4. Depression and anxiety have a shown a significant relationship with each other.
5. There is a significant difference between males and females NEET Aspirants with regard to Depression and Stress
6. There is no significant difference between male and female NEET aspirants with regard to Anxiety

Bibliography

1. Yadav, S., & Srivastava, S. K. (2020). Correlational study of academic stress and suicidal ideation among students. *Indian Journal of Public Health Research & Development*, 11(10), 56-61.
2. Khurshed, M., & Naseem, S. (2021). A study on depression, anxiety, stress, and life quality among medical aspirants and medical students of Aligarh City in North India. *Archives of Medicine and Health Sciences*, 9(1), 87.
3. Preetha, S., Sridevi, G., & Gayathri, K. E. (2021). An Evaluation of Stress Induced by Neet Coaching among School Children. *Journal of Pharmaceutical Research International*, 43-52
4. Thapar, A., Collishaw, S., Pine, D. S., & Thapar, A. K. (2012). Depression in adolescence. *Lancet (London, England)*, 379(9820), 1056–1067. [https://doi.org/10.1016/S0140-6736\(11\)60871-4](https://doi.org/10.1016/S0140-6736(11)60871-4)
5. Grover, S., Raju, V. V., Sharma, A., & Shah, R. (2019). Depression in Children and Adolescents: A Review of Indian studies. *Indian journal of psychological medicine*, 41(3), 216–227. https://doi.org/10.4103/IJPSYM.IJPSYM_5_19

6. Marimuthu, J., P., L., & Grace, D. L. (2022). Prevalence of anxiety and depression among students appearing for NEET examination in a rural and urban area of Tamil Nadu: a cross sectional analytical study. *International Journal Of Community Medicine And Public Health*, 9(3), 1501–1504. <https://doi.org/10.18203/2394-6040.ijcmph20220719>
7. Mishra, S., Yadav, A., Khadka, P., & KC, P. (2020). Stress and Coping Among Students Preparing for Medical Entrance Examinations. *Journal of Psychiatrists' Association of Nepal*, 9(2), 42–47. <https://doi.org/10.3126/jpan.v9i2.36283>
8. Kanagasabapathy, S., & Raj, S. (2017). Depression, anxiety and stress--a cross-sectional study in a cohort of school students from South India. *Journal of Evolution of Medical and Dental Sciences*, 6(42), 3205-3209.
9. Gautam, M. S., Singh, B. G., & Rao, S. R. (2019). Depression in Kota Coaching Students in Relation to Motivation-Type and Perceived Ability. *Think India Journal*, 22(35), 866-873.
10. Deb, Sibnath & Strodl, Esben & Sun, Jiandong. (2015). Academic Stress, Parental Pressure, Anxiety and Mental Health among Indian High School Students. *International Journal of Psychology and Behavioural Sciences*. 5. 26-34. [10.5923/j.ijpbs.20150501.04](https://doi.org/10.5923/j.ijpbs.20150501.04).
11. Kumari, R. (2023, March 28). NEET Aspirant dies by suicide in Tamil Nadu, reason not known. *TimesNow*. [NEET Aspirant dies by suicide in Tamil Nadu, reason not known | Education News, Times Now \(timesnownews.com\)](https://timesnownews.com/education/news/2023/03/28/neet-aspirant-dies-by-suicide-in-tamil-nadu-reason-not-known)
12. Sincero, S. M. (n.d.). Stress and Cognitive Appraisal - Lazarus and Folkman. *Stress and Cognitive Appraisal - Lazarus and Folkman*. <https://explorable.com/stress-and-cognitive-appraisal?gid=1600>
13. T. (2022, October 10). World Mental Health Day 2022: Depression in students is a reality, 5 markers of anxiety you should be aware of. *TimesNow*. <https://www.timesnownews.com/education/world-mental-health-day-2022-depression-in-students-is-a-reality-5-markers-of-anxiety-you-should-be-aware-of-article-94755461>
14. Study Finds 37 Per Cent University Students in India Suffer Moderate Depression. (2017, April 9). *NDTV.com*. <https://www.ndtv.com/education/world-health-day-2017-study-finds-37-per-cent-university-students-in-india-suffer-moderate-depression-1679142>

15. NEET UG 2023 | Over 20 lakh applicants registered, female candidates more by 2 lakhs. (2023, April 20). India Today. <https://www.indiatoday.in/education-today/news/story/neet-ug-2023-over-20-lakh-applicants-registered-female-candidates-more-by-2-lakhs-2362233-2023-04-20>
16. The two biggest mental health problems in students and how to deal with them. (2022, October 10). India Today. <https://www.indiatoday.in/education-today/featurephilia/story/two-biggest-mental-health-problems-in-students-and-how-to-deal-with-them-anxiety-depression-2283562-2022-10-10>